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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/727,567	11/30/2000	Karen Ann Bradley	50325-0504	6744

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HICKMAN PALERMO TRUONG & BECKER, LLP
1600 WILLOW STREET
SAN JOSE, CA 95125

EXAMINER	
LIN, KENNY S	

ART UNIT	PAPER NUMBER
2154	

DATE MAILED: 11/30/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/727,567	BRADLEY ET AL.	
	Examiner	Art Unit	
	Kenny Lin	2154	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *27 October 2004*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1,2,4-8,10-14 and 16-20* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1,2,4-8,10-14 and 16-20* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date *10/21/2004*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

1. Claims 1-20 are presented for examination. Claims 3, 9 and 15 are cancelled.

2. The IDS submitted on 10/21/2004 has been considered.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

4. Claims 1, 4, 6-7, 10, 12-13, 16 and 18-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shurmer et al (hereinafter Shurmer), US 5,974,237, in view of St. Laurent (hereinafter Laurent), Describing your Data: DTDs and XML Schemas, December 1, 1999, O'Reilly XML.com.

5. Shurmer was cited in the previous office action.

6. As per claims 1, 7 and 19, Shurmer taught the invention substantially as claimed including a method for monitoring a level of network service offered by a service provider, the method comprising the computer-implemented steps of:

a. Monitoring a service level contract between the service provider and a particular customer (col.7, lines 42-46, col.8, lines 3-14, col.14, lines 39-48);

b. data defining one or more tests for monitoring the level of network service being provided to a particular customer by the service provider (col.1, lines 47-60, col.6, lines 57-67, col.7, lines 1-9, col.8, lines 3-14, col.14, lines 39-48, col.16, lines 39-43, col.20, lines 52-56);

c. And information defining a specific time range for when the one or more tests are to be performed (col.16, lines 35-46);

d. Distributing the one or more tests to one or more agents, wherein the one or more agents configure devices associated with the network (col.17, lines 48-67, col.18, lines 1-31, col.20, lines 52-56) to perform the one or more tests within the specific time range (col.13, lines 19-28, col.16, lines 35-46, col.18, lines 32-40) and receive result information from the devices performing the one or more tests (col.7, lines 42-52, col.8, lines 15-20, col.18, lines 27-31).

7. Shurmer further taught to collect a plurality of user input operational parameters into a monitoring session or class (col.2, lines 50-64, col.17, lines 19-45; e.g., schema causes configuration for monitoring). Shurmer did not specifically teach receiving a schema that provides a configuration for monitoring a service level contract, wherein the schema comprises data. Laurent taught that XML schemas can carry information, describe what different elements should contain and how they should be used (What DTD and XML Schemas Do). It would have been obvious to one of ordinary skill in the art at the time the invention was made to carry

operational parameters and their descriptions using XML schemas. It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Shurmer and Laurent because Laurent's teaching of using XML schemas helps Shurmer's method to collect and carry the operational parameters, their descriptions of components and elements in data structures in preparing the network monitoring (Shurmer, col.20, lines 52-57).

8. As per claim 13, Shurmer taught the invention substantially as claimed including a network device configured for monitoring a level of network service offered by a service provider, comprising:

a. A network interface (col.5, lines 37-38);

b. A processor coupled to the network interface and receiving information from the network interface (col.5, lines 27-45);

c. A computer-readable medium accessible by the processor and comprising one or more sequences of instructions (inherently known feature) which, when executed by the processor, cause the processor to carry out the steps of:

   i. Monitoring a service level contract between the service provider and a particular customer (col.7, lines 42-46, col.8, lines 3-14, col.14, lines 39-48);

   ii. data defining one or more tests for monitoring the level of network service that is being provided to a particular customer by the service provider (col.1, lines 47-60, col.6, lines 57-67, col.7, lines 1-9, col.8, lines 3-14, col.14, lines 39-48, col.16, lines 39-43, col.20, lines 52-56) and

information defining a specific time range for when the one or more tests are to be performed (col.16, lines 35-46);

iii. Distributing the one or more tests to one or more agents, wherein the one or more agents configure devices associated with the network (col.17, lines 48-67, col.18, lines 1-31, col.20, lines 52-56) to perform the one or more tests during the specific time range (col.13, lines 19-28, col.16, lines 35-46, col.18, lines 32-40) and receive result information from the devices performing the one or more tests (col.7, lines 42-52, col.8, lines 15-20, col.18, lines 27-31).

9. Shurmer further taught to collect a plurality of user input operational parameters into a monitoring session or class (col.2, lines 50-64, col.17, lines 19-45; e.g., schema causes configuration for monitoring). Shurmer did not specifically teach receiving a schema that provides a configuration for monitoring a service level contract, wherein the schema comprises data. Laurent taught that XML schemas can carry information, describe what different elements should contain and how they should be used (What DTD and XML Schemas Do). It would have been obvious to one of ordinary skill in the art at the time the invention was made to carry operational parameters and their descriptions using XML schemas. It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Shurmer and Laurent because Laurent's teaching of using XML schemas helps Shurmer's method to collect and carry the operational parameters, their descriptions of components and elements in data structures in preparing the network monitoring (Shurmer, col.20, lines 52-57).

10. As per claims 4, 10 and 16, Shurmer and Laurent taught the invention substantially as claimed in claims 1, 7 and 13. Shurmer further taught to monitor service level contract using operational parameters (col.7, lines 42-46, col.8, lines 3-14, col.14, lines 39-48). Shurmer did not specifically teach that the schema models the service level contract and is based on XML. Laurent taught that XML schemas, based on XML, could carry information, describe what different elements should contain and how they should be used (What DTD and XML Schemas Do; carrying descriptions which define the service level contract). It would have been obvious to one of ordinary skill in the art at the time the invention was made to carry operational parameters and their descriptions using XML schemas to define the service level contract. It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Shurmer and Laurent because Laurent's teaching of using XML schemas helps Shurmer's method to collect and carry the operational parameters, their descriptions of components and elements in data structures according to a service level contract in preparing network monitoring (Shurmer, col.20, lines 52-57).

11. As per claims 6, 12 and 18, Shurmer and Laurent taught the invention substantially as claimed in claims 1, 7 and 13. Shurmer further taught that one or more agents configure the devices to perform the one or more tests only within the specific time range (col.13, lines 19-28, col.16, lines 35-45).

12. Claims 2, 8, 14 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shurmer and Laurent as applied to claims 1, 7, 13 and 19 above, and further in view of "Official Notice".

13. As per claims 2, 8, 14 and 20, Shurmer and Laurent taught the invention substantially as claimed in claims 1, 7, 13 and 19. Shurmer further taught to include the steps of:

a. Creating and storing reporting information based on result information received from the devices during the specific time range (col.7, lines 42-52, col.8, lines 15-20, col.16, lines 35-48, col.20, lines 59-67, col.21, lines 1-3, col.23, lines 46-56).

14. Shurmer further taught to monitor service parameter which describes a service supported, performance of each network element, capacity, availability and errors (col.6, lines 57-67, col.7, lines 1-9). Shurmer and Laurent did not specifically teach to that the report indicates whether the customer is actually receiving the level of network service offered by the service provider in the service level contract base on the result information received form the devices. However, since Shurmer taught to perform tests to monitor service parameter, it is obvious to use the result of the tests to determine whether the customer is actually receiving service according to what is agreed on the service level contract. Official Notice is taken that it is obvious to create and store reports base on obtained test results and determine various statistics using the results. It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Shurmer and further use the test results from Shurmer's system to determine various

statistics and also whether services provided to the customers is according to the contract agreement to ensure quality of service to the customers.

15. Claims 5, 11 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shurmer and Laurent as applied to claims 1, 7, and 13 above, and further in view of Schuster et al (hereinafter Schuster), US 6,363,053.

16. Schuster was cited in the previous office action.

17. As per claims 5, 11 and 17, Shurmer and Laurent taught the invention substantially as claimed in claims 1, 7 and 13. Shurmer further taught to allow users to define specific times for monitoring the level of service that is being provided by the service provider (col.13, lines 19-28, col.16, lines 35-45) and to input user operational parameters for monitoring service level contract (col.7, lines 42-46, col.8, lines 3-14, col.14, lines 39-48). Laurent further taught to use XML Schemes to provide configuration for monitoring a service level contract (see claim 1 rejection). Shurmer and Laurent did not specifically teach to further comprising the steps of:

a. Generating, at a server, interface data for defining the schema for monitoring the service level contract; and
b. Communicating the interface data to a client that is remote form said server, wherein the interface data allows users to define specific times for monitoring.

18. Schuster taught to generate, at a server, interface data for defining a service level contract (col.1, lines 61-67, col.2, lines 1-18, 62-65, col.5, lines 8-12) and to communicate the interface data to a client that is remote from the server (col.5, lines 8-12). It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Shurmer, Laurent and Schuster because Schuster's teaching of generating interface data defining a service level contract help Shurmer and Laurent's method to define the one or more tests for monitoring the level of network into schemes according to a specific time frame that the customers stated in the contract. It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Shurmer, Laurent and Schuster because Schuster's teaching of communicating the interface data allows Shurmer's users to define specific times for monitoring the level of service using the interface data (col.13, lines 19-28, col.16, lines 35-39).

Response to Amendment

19. Applicant's arguments with respect to claims 1-2, 4-8, 10-14 and 16-20 have been considered but are moot in view of the new ground(s) of rejection.

20. In the remark, applicant argued that: (1) Shurmer does not disclose data defining tests for monitoring a level of network service being provided to a particular customer. The claims involve active testing for SLA compliance. Examples of tests are disclosed in page 11, lines 14-19. Shurmer teaches away from tests for monitoring a service level contract. (2) Shurmer does not teach "distributing the one or more tests to one or more agents, wherein the one or more

agents configure devices associated with the network to perform the one or more tests during the specific time range and receive result information from the devices performing the one or more tests. Shurmer does not teach the use of agents to configure network devices to perform monitoring tests and to receive results from the devices, but rather directly collects information in the form of data signals.

21. Examiner traverse the argument that:

As to point (1), Shurmer taught to monitoring a service level contract between the service provider and a particular customer (col.7, lines 42-46, col.8, lines 3-14, col.14, lines 39-48; monitoring of a communications network at the network or service levels...) by inputting operational parameter to be tested (e.g., operational parameters are input in order to carry out certain tests) and the operational parameters cause to monitor the level of network service being provided to a particular customer by the service provider including switching capacity, bandwidth and slot availability (col.6, lines 57-67, col.7, lines 1-9, col.8, lines 3-14, col.14, lines 39-48). Furthermore, in response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., tests for monitoring the level of network service include ICMP metrics, UDP metrics, DNS metrics, HTTP metrics and VoIP metrics) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

As to point (2), Shurmer taught to distributing the a test to a agent, wherein the agent configure devices associated with the network (col.17, lines 48-67, col.18, lines 1-31, col.20, lines 52-56; performance data session server application) to perform the test during the specific time range (col.13, lines 19-28, col.16, lines 35-46, col.18, lines 32-40; time window) and receive result information from the devices performing the one or more tests (col.7, lines 42-52, col.8, lines 15-20, col.18, lines 27-31; receive responses).

Conclusion

22. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Lee et al, US 2002/0169788.

23. A shortened statutory period for reply to this Office action is set to expire THREE MONTHS from the mailing date of this action.

24. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kenny Lin whose telephone number is (571) 272-3968. The examiner can normally be reached on 8 AM to 5 PM Tue.-Fri. and every other Monday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Follansbee can be reached on (571) 272-3964. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

ksl
November 24, 2004

11/24/04